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B. Hilliard
1 of 3

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

EX PARTE SMITH et al.

Application for Patent

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FOR:

USER INTERFACE METHOD AND SYSTEM FOR APPLICATION
PROGRAMS IMPLEMENTED WITH COMPONENT
ARCHITECTURES

APPEAL BRIEF

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APPENDIX A - CLAIMS ON APPEAL

I. REAL PARTY IN INTEREST

The real party in interest is ROXIO, Inc., the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

The undersigned is not aware of any related appeals and/or interferences.

III. STATUS OF THE CLAIMS

A total of 42 claims were presented during prosecution of this application. The Applicants cancelled claims 1-8. The Applicants appeal rejected claims 9-42.

IV. STATUS OF THE AMENDMENTS

A continued prosecution application (CPA) was filed July 26, 2002. The original application was filed on February 1, 1999. All amendments have been entered, leaving rejected claims 9-42.

V. SUMMARY OF THE INVENTION

The present invention provides a system and a method for providing a graphical user interface for a component based application. An example of the graphical user interface is shown in Figure AB-1 below (Figure 3 from the specification). The example graphical user interface includes specific components arranged in frames within a DHTML browser (p. 5, lines 10-11). Though the present invention is described primarily in terms of the DHTML browser, the present invention is not limited to a graphical user interface rendered within the DHTML browser (p. 7, lines 16-18). With respect to Figure AB-1, frames 104, 108, and 112 of the graphical user interface include a variety of controls and other user interface components appropriate to an application program and the application

program's present context (p. 5, lines 11-12). A frame 116 includes a document viewer and the DHTML browser itself includes a conventional menu bar 120 (p. 5, lines 13-14).

An architectural block diagram of the system of the present invention as used to provide the graphical user interface for the component based application, in accordance with the present invention, is shown in Figure AB-2 below (p. 6, lines 12-13, Figure 7 from the specification). The architecture shown in Figure AB-2 includes a renderer 200, which communicates with an application proxy 204 (p. 6, lines 15-17). A set of presently instantiated user interface components 208 is provided (p. 6, line 17). Also, a set of presently instantiated document viewers 212 is provided (p. 6, lines 17-18). As used herein, the term "user interface" is intended to encompass user interface components such as controls, display boxes, etc ..., and should not be confused with application program components (p. 6, lines 18-20). Furthermore, as used herein, the term "document viewer" is intended to comprise both functions of displaying a currently active document in an appropriate format and a set of functions and methods appropriate to the document viewer (p. 6, lines 20-22). Document viewers 212 include viewers appropriate to observe and interact with data corresponding to each context of an application program (p. 8, lines 24-26). Each document viewer 212 has one or more workflows (i.e., user interface requirements specifications) defined for it (p. 8, line 30). Each workflow includes methods, variables, and states that are required to be shared among program components (p. 8, line 30 through p. 9, line 1). Various user interface components are also allowed to be registered with each workflow (p. 9, line 3). Additionally, each workflow allows default values and/or conditions to be defined (p. 9, lines 3-4). Furthermore, a workflow manager 216 is provided to implement each appropriate workflow, as selected by a user or otherwise specified (p. 7, lines 4-5). An active document manager 220 is responsible for

handling communications between the workflow manager 216 and the currently active one of the one or more documents 224 loaded into the application program (p. 7, lines 5-7).

Renderer 200 includes a set of layouts which are stored as DHTML pages defined for the underlying application program (p. 7, lines 21-22). Each layout defines a respective graphical user interface organization for a particular context of the application program (p. 7, lines 22-23). Application proxy 204 serves as a communication conduit between renderer 200 and the components of the application program (p. 8, lines 5-6). As such, application proxy 204 communicates to renderer 200, to user interface components 208, to document viewers 212, and to workflow manager 216 (p. 7, lines 3-5). To renderer 200, application proxy 204 appears as a single, monolithic application program (p. 8, lines 6-7). All details of the components which make up the application program are essentially hidden from renderer 200 (p. 8, lines 7-8). The renderer 200 only needs to interface with the application proxy 204 (p. 8, lines 8-9). Thus, other components of the application program can be modified in a manner which is transparent to the renderer 200 (p. 8, lines 9-10). Application proxy 204 is responsible for determining changes that are required to be made to the application program user interface, and whether the changes require rendering of a new layout or the updating of the present layout (p. 10, lines 27-29).

Workflow manager 216 manages communication between document viewers 212, user interface components 208, and renderer 200 (through application proxy 204) (p. 9, lines 11-12). Workflow manager 216 primarily communicates with application proxy 204 (p. 9, line 7). However, for efficiency, workflow manager 216 can communicate directly with user interface components 208 and with document viewers 212 (p. 10, lines 8-9). During instantiation, each user interface component 208 for a workflow registers itself with the workflow manager 216 (p. 9, lines 12-14). Registration with the workflow manager 216 allows the user interface component 208 to identify variables of interest (p. 9,

lines 12-15). Also, the user interface component 208 deregisters itself with the workflow manager 216 as it is destroyed (p. 9, lines 12-15). Additionally, the workflow manager 216 interfaces with the active document manager 220 to retrieve and/or to write information to the currently active document 224 as required by a workflow (p. 9, lines 20-21).

In accordance with one embodiment, the present invention is represented as a system for providing a graphical user interface for a component based application program. The system includes a number of user interface components, a document viewer, and a renderer. The document viewer is provided for displaying or modifying a document within the component based application program. The document viewer has a user interface requirements specification referencing at least one of the number of user interface components. The renderer is provided to render the graphical user interface for the component based application program. Upon addition of the document viewer as a component of the component based application program, the graphical user interface is rendered according to the user interface requirements specification of the document viewer. Also, the graphical user interface can be rendered without having to recompile or reinstall the component based application program following addition of the document viewer. (Claim 9)

In another embodiment, the present invention is represented as a method for providing a graphical user interface for a component based application program. The method includes providing a user interface requirements specification for a document viewer, wherein the user interface requirements specification references at least one of a number of user interface components. The document viewer is used to either display or modify a document within the component based application program. The method further includes rendering the graphical user interface for the component based application program in accordance with the user interface requirements specification of the document

viewer. The rendering can be performed upon addition of the document viewer as a component of the component based application program without having to recompile or reinstall the component based application program. (Claim 21)

In yet another embodiment, the present invention is again represented as a system for providing a graphical user interface for a component based application program. The system includes at least one user interface component, a document viewer, a renderer, and an application proxy. The document viewer is provided for displaying or modifying a document within the component based application program. The document viewer has a user interface requirements specification referencing at least one user interface component. The document viewer also has at least one predefined user interface layout that defines an arrangement of the referenced user interface components. The renderer is provided to render the graphical user interface for the component based application program. The graphical user interface is rendered in accordance with the predefined user interface layout and a present context of the component based application program. The application proxy is provided to manage communication between the renderer, the document viewer, and the referenced user interface components. Additionally, the application proxy ensures that the graphical user interface is appropriately rendered upon a change in the present context of the component based application program. (Claim 35)

In another embodiment, the present invention represents a method for creating a graphical user interface for an application program that is implemented with a component architecture. The method includes providing at least one document viewer for displaying or modifying a document within a component based application program. The provided document viewer has a user interface requirements specification that references at least one user interface component. The referenced user interface component is to be displayed in the graphical user interface in accordance with at least one context of the application

program. The method further includes defining a graphical user interface layout for the user interface component. The graphical user interface layout includes a position and an arrangement for the user interface component in accordance with the context of the application program. The user interface component is instantiated in association with the application program. The method also includes determining a present context of the application program and rendering the graphical user interface in accordance with the graphical user interface layout defined for the present context of the application program. The method continues by rerendering the graphical user interface each time the context of the application program changes. (Claim 42)

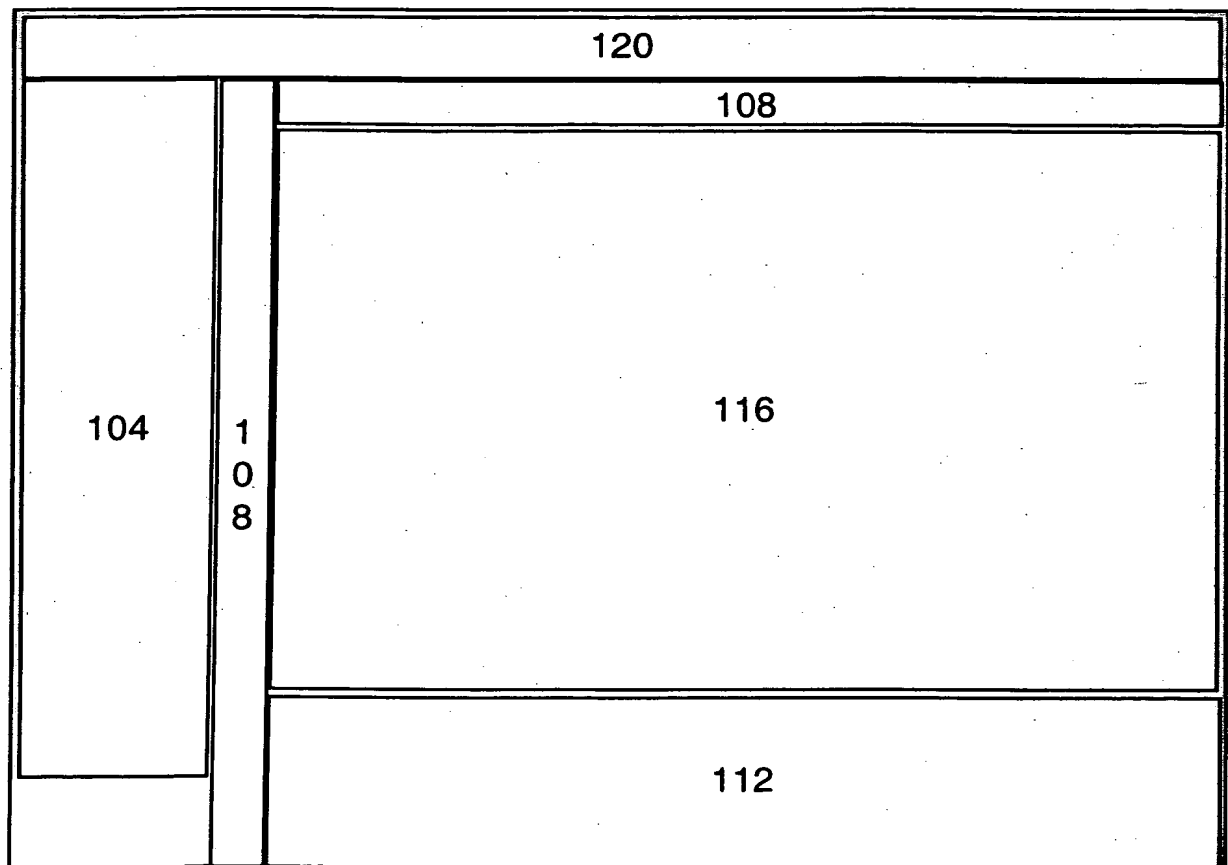


Fig. AB-1

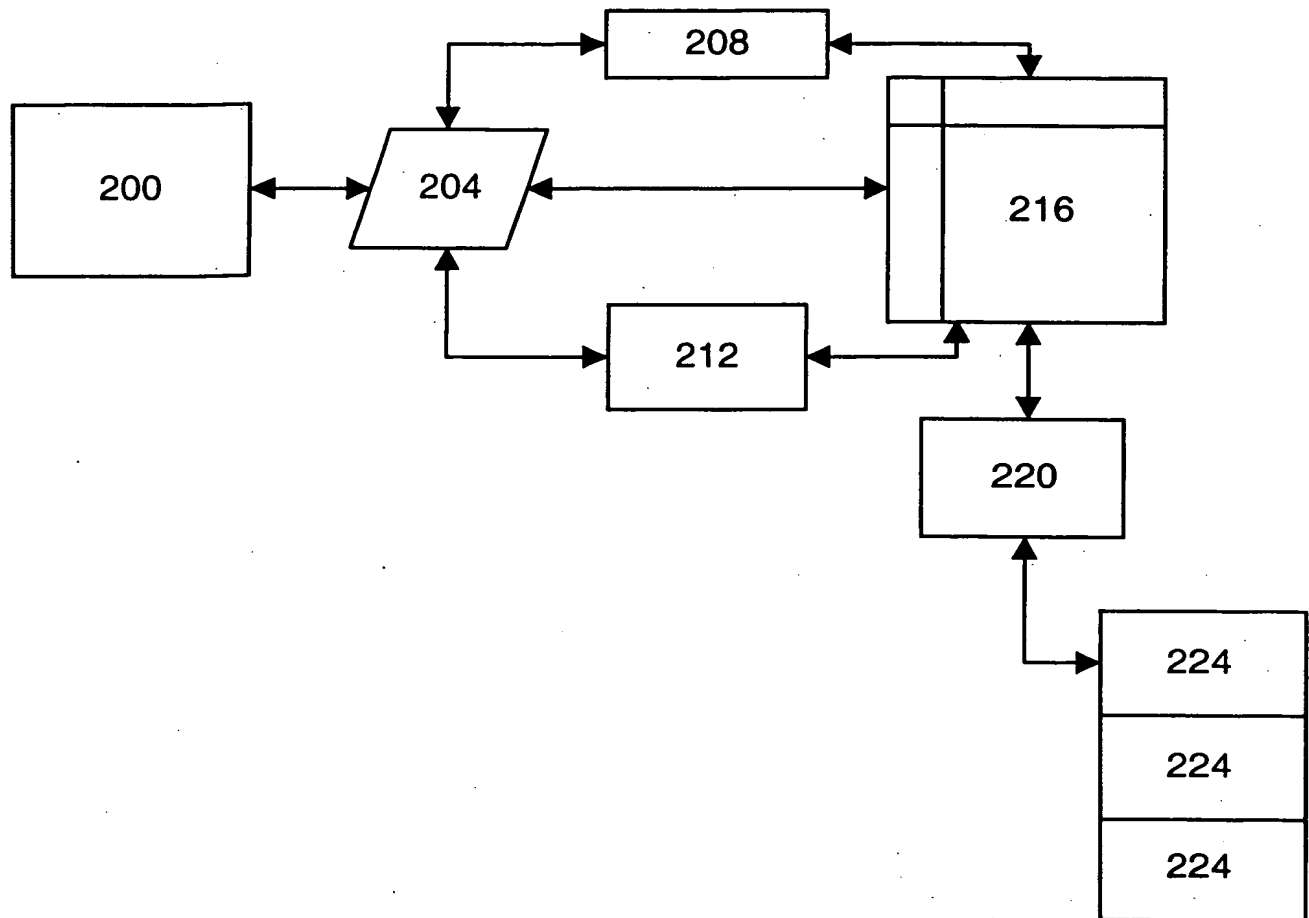


Fig. AB-2

VI. ISSUES

The issues presented in this appeal are whether the rejections under 35 U.S.C. §103(a) of the claims under appeal are proper. The issues therefore are as follows:

- A. Are claims 9-34 properly rejected under 35 U.S.C. §103(a)?
- B. Are claims 35-41 properly rejected under 35 U.S.C. §103(a)?
- C. Is claim 42 properly rejected under 35 U.S.C. §103(a)?

VII. GROUPING OF THE CLAIMS

Applicants propose three groups of claims. The claims within each group will stand or fall together. The first group includes claims 9-34 ("Group I"). The second group includes claims 35-41 ("Group II"). The third group includes claim 42 ("Group III"). Each group will be argued separately.

VIII. ARGUMENTS

- A. **The combination of references as relied upon by the Examiner fail to teach or suggest all limitations of each of claims 9-34 as required to establish a *prima facie* case of obviousness.**

Rejections

Applicants' claims 9-11, 13, 16, 21-25, 27, and 30 (from Group I) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith et al. ("Smith") (U.S. Patent No. 6,222,537 B1) and Ezekiel et al. ("Ezekiel") (U.S. Patent No. 5,625,783).

Applicants' claims 20 and 34 (from Group I) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, Ezekiel, and Brown (U.S. Patent No. 6,173,284).

Applicants' claims 14-15 and 28-29 (from Group I) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, Ezekiel, and Sparks et al. ("Sparks") (U.S. Patent No. 6,222,838 B1).

Applicants' claims 17-19 and 31-33 (from Group I) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, Ezekiel, and Notani (U.S. Patent No. 6,222,533).

Applicants' claims 12 and 26 (from Group I) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, Ezekiel, and Berteig (U.S. Patent No. 6,348,936).

Summary of Group I Claims

Claims 9-20 of Group I are directed to a system for providing a graphical user interface for a component based application program. Claims 21-34 of Group I are directed to a method for providing a graphical user interface for a component based application program. Claims 10-20 depend from independent claim 9. Claims 20-34 depend from independent claim 21. Both independent claims 9 and 21 were rejected by the Examiner based on the combined teachings of Smith and Ezekiel.

Both the system and the method of claims 9-34 include a number of common elements and limitations. The Group I claim limitations that are not described in the cited art when considered as a whole, as relied on by the Examiner for the basis of rejection, are described as follows:

- The claims of Group I require a document viewer for displaying a document or modifying the document within a component based application program.

- The claims of Group I further require that the document viewer have a user interface requirements specification. The user interface requirements specification is required to reference at least one of a plurality of user interface components.
- The claims of Group I also require a renderer to render a graphical user interface for the component based application program. The renderer is required to render the graphical user interface according to the user interface requirements specification of the document viewer.

Summary of Smith Reference

Smith teaches a user interface builder to be used for creating customized user interfaces. The user interface builder of Smith enables users to associate images, animation, sound clips, and other media with specific predefined states of user interface controls. To accomplish this, the user interface builder of Smith separates the behavioral logic of user interface controls from their visual representations.

Examiner's Position

1) With regard to independent claim 9, the Examiner asserts that Smith (column 4, lines 13-14) teaches a system for providing a graphical user interface for a component based application program comprising a document viewer for displaying a document or modifying a document within a component based application program.

2) With regard to independent claim 9, the Examiner asserts that Smith (column 4, lines 41-49) teaches a system for providing a graphical user interface for a component based application program comprising a document viewer having a user interface requirements specification referencing at least one of a plurality of user interface components.

3) With regard to independent claim 9, the Examiner asserts that Smith (column 4, lines 46-47) teaches a system for providing a graphical user interface for a component based application program comprising a renderer to render a graphical user interface for the application program according to said document viewer's user interface requirement specification.

4) With regard to independent claim 21, the Examiner asserts the same teachings by Smith as applied to support the rejection of independent claim 9.

5) Additionally, the Examiner relies on Ezekiel to teach an addition of software components to an application program without recompiling or reinstalling the application program.

Applicants' Rebuttal to Examiner's Position 1

With regard to claim 9, the Examiner incorrectly asserts that Smith (column 4, lines 13-14) teaches a system for providing a graphical user interface for a component based application program comprising a document viewer for displaying a document or modifying a document within a component based application program. Smith (column 4, lines 13-14) recites the following:

"A button control which is set to trigger turning to a new page of text when pressed may have associated with its hovering state an animation sequence comprising images of a book which give the appearance of turning pages when the images are cycled through."

The above teaching of Smith, is provided as an example in a context of discussing how an interface creator can associate "a series of images for an animation sequence with a 'hovering' state of an interface control (a state in which a mouse pointer is over the control but no mouse button has been pressed), which animation sequence suggests the function

that will be triggered by further user interaction." (Smith, column 4, lines 6-12) The teaching of Smith as referenced by the Examiner is provided as an example of how feedback can be given to end users in response to mouse proximity and keyboard focus. More specifically, the teaching of Smith, as referenced by the Examiner, simply refers to an image of a book having turning pages. The image of the book appears when a mouse pointer is positioned over a button, wherein the button is defined to trigger a turning to a new page of text when pressed. Therefore, the image of the book referenced by the Examiner simply provides a visual representation of an action to be performed upon activation of the underlying button. Furthermore, the image of the book referenced by the Examiner does not allow for observation and interaction with data corresponding to a context of an underlying application program. Thus, Smith does not teach "a document viewer for displaying a document or modifying a document within a component based application program." Furthermore, when viewed in light of the present invention's specification, a button control and its associated function, as taught by Smith, is representative of a "user interface component" not "a document viewer for displaying a document or modifying a document within a component based application program." Simply stated, neither the button control nor the associated hovering animation sequence, as identified in the example provided by Smith, represents "a document viewer" as claimed by the present invention.

To be clear, the document viewer of the present invention refers to an entity that includes both functions of displaying a currently active document in an appropriate format and a set of functions and methods appropriate to the document viewer (p. 6, lines 20-22, of specification). Document viewers 212 include viewers appropriate to observe and interact with data corresponding to each context of an application program (p. 8, lines 24-26, of specification).

In accordance with the argument presented above, the Examiner has failed to consider the document viewer of the present invention in view of the specification. During patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). When the specification provides definitions for terms appearing in the claims, the specification can be used in interpreting claim language. *In re Vogel*, 422 F.2d 438, 441, 164 USPQ 619, 622 (CCPA 1970). "Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'." 710 F.2d at 802, 218 USPQ at 292 (quoting *In re Okuzawa*, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976)) (emphasis in original).

Applicants' Rebuttal to Examiner's Position 2

With regard to independent claim 9, the Examiner incorrectly asserts that Smith (column 4, lines 41-49) teaches a system for providing a graphical user interface for a component based application program comprising a document viewer having a user interface requirements specification referencing at least one of a plurality of user interface components. Smith (column 4, lines 41-49) recites the following:

"The interface builder tool includes: a set of definitions of selectable user interface control types including, for each control type, one or more predefined functions and a predefined state model defining a set of operational states and transitions between the states; means for generating a user interface control of a selected control type; and means for associating property attributes with one or more specific operational states of a user interface control."

Notwithstanding the fact that Smith does not teach a document viewer, as previously discussed in Applicants' Rebuttal to Examiner's Position 1, the above teaching of Smith, as relied on by the Examiner, fails to teach or suggest the user interface requirements specification referencing a user interface component. Smith teaches "a set of definitions of selectable user interface control types", wherein "user interface control types" are analogous to "user interface components" in the presently claimed invention. In following, the above teaching by Smith relates to defining a user interface control type (i.e., component) in terms of predefined functions and a predefined state model. In contrast, the user interface requirements specification of the document viewer in the presently claimed invention is recited as referencing a user interface component as compared to defining a user interface component. Therefore, a "document viewer having a user interface requirements specification referencing at least one of said plurality of user interface components", as claimed in the present invention, is neither explicitly nor implicitly taught or suggested by the cited art of record. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Furthermore, the Examiner has ignored the limitation of the present invention that requires the user interface requirements specification be a part of the document viewer. Therefore, the Applicants submit that all combined elements and limitations of claim 9 have not been considered as a whole by the Examiner. In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

Applicants' Rebuttal to Examiner's Position 3

With regard to independent claim 9, the Examiner incorrectly asserts that Smith (column 4, lines 46-47) teaches a system for providing a graphical user interface for a component based application program comprising a renderer to render a graphical user interface for the application program according to said document viewer's user interface requirement specification. Smith (column 4, lines 46-47) recites the following:

"... means for generating a user interface control of a selected control type ..."

As previously set forth in Applicants' Rebuttal to Examiner's Positions 1 and 2, Smith neither explicitly nor implicitly teaches or suggests a document viewer, much less a document viewer having a user interface requirements specification. Therefore, it follows that Smith also does not teach "a renderer to render a graphical user interface for the component based application program according to said document viewer user interface requirements specification." Again, the Applicants submit that all combined elements and limitations of claim 9 have not been considered as a whole by the Examiner.

Applicants' Rebuttal to Examiner's Position 4

With regard to claim 21, the Examiner asserts the same teachings by Smith as applied to support the rejection of claim 9. As previously set forth, Smith neither explicitly nor implicitly teaches or suggests a document viewer, a document viewer having a user interface requirements specification, or a renderer to render a graphical user interface for the application program according to said document viewer's user interface requirement specification. Therefore, the Applicants submit that Smith does not teach or suggest "providing a user interface requirements specification for a document viewer" or "rendering a graphical user interface for the component based application program according to the document viewer user interface requirements specification" as required by

claim 21. Again, to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Applicants' Rebuttal to Examiner's Rejections of Dependent Claims

Since dependent claims 10-20 incorporate all elements and limitations of claim 9, the Applicants submit that these dependent claims are patentable for at least the same reasons that claim 9 is patentable over the cited art of record. Similarly, since dependent claims 22-34 incorporate all elements and limitations of claim 21, the Applicants submit that these dependent claims are patentable for at least the same reasons that claim 21 is patentable over the cited art of record.

- B. The combination of references as relied upon by the Examiner fail to teach or suggest all limitations of each of claims 35-41 as required to establish a *prima facie* case of obviousness.**

Rejections

Applicants' claims 35 and 39 (from Group II) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith and Ezekiel.

Applicants' claims 36-38 (from Group II) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, Ezekiel, and Brown.

Applicants' claims 40-41 (from Group II) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, Ezekiel, and Sparks.

Summary of Group II Claims

As with claims 9-20 of Group I, claims 35-41 of Group II are also directed to a system for providing a graphical user interface for a component based application program. Claims 36-41 depend from independent claim 35. Independent claim 35 was rejected by the Examiner based on the combined teachings of Smith and Ezekiel.

The Group II claim limitations that are not described in the cited art when considered as a whole, as relied on by the Examiner for the basis of rejection, are described as follows:

- As with the claims of Group I, the claims of Group II also require a document viewer for displaying a document or modifying the document within a component based application program.
- As with the claims of Group I, the claims of Group II also require that the document viewer have a user interface requirements specification. The user interface requirements specification is required to reference at least one of a plurality of user interface components.
- The claims of Group II require that the document viewer have a predefined user interface layout that defines an arrangement of the user interface components.
- As with the claims of Group I, the claims of Group II also require a renderer to render a graphical user interface for the component based application program. However, the claims of Group II require the renderer to render the graphical user interface according to the predefined user interface layout and a present context of the component based application program.
- The claims of Group II require an application proxy for managing communication between the renderer, the document viewer, and the user interface components. The

application proxy is required to ensure that the graphical user interface is rendered upon a change in the present context of the component based application program.

Examiner's Position

Examiner's Positions 1-3 that follow are essentially identical to the Examiner's Positions 1-3 previously presented with respect to the Group I claims.

1) With regard to independent claim 35, the Examiner asserts that Smith (column 4, lines 13-14) teaches a document viewer for displaying a document or modifying a document within a component based application program.

2) With regard to independent claim 35, the Examiner asserts that Smith (column 4, lines 41-49) teaches the document viewer having a user interface requirements specification referencing at least one of a plurality of user interface components.

3) With regard to independent claim 35, the Examiner asserts that Smith (column 4, lines 46-47) teaches a renderer to render a graphical user interface for the application program according to said at least one predefined user interface layout.

4) With regard to independent claim 35, the Examiner asserts that the predefined user interface layout defining an arrangement of user interface components is an "inherent" part of the document viewer.

5) With regard to independent claim 35, the Examiner has chosen to completely ignore the following claim element:

"an application proxy to manage communication between said renderer, said document viewer, and said at least one user interface component such that said graphical user interface is rendered upon a change in said present context."

Applicants' Rebuttal to Examiner's Positions 1-3

The Examiner's Positions 1-3 with respect to the Group II claims are essentially identical to Examiner's Positions 1-3 previously presented with respect to the Group I claims. Therefore, the Applicants' Rebuttal to each of Examiner's Positions 1-3 as previously presented with respect to the Group I claims are equally applicable to the Examiner's Positions 1-3 with respect to the Group II claims.

Applicants' Rebuttal to Examiner's Position 4

The Examiner has incorrectly asserted that the predefined user interface layout defining an arrangement of user interface components is an "inherent" part of the document viewer. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Applicants' submit that the Examiner has failed to provide a basis in fact and/or technical reasoning that supports a determination that the predefined user interface layout defining an arrangement of user interface components is an "inherent" part of the document viewer. Additionally, to establish a prima facie case of obviousness against a

claimed invention, all the claim limitations must be taught or suggested by the prior art. Since the Examiner has failed to indicate how the prior art teaches or suggests the document viewer having a predefined user interface layout defining an arrangement of user interface components, the Examiner has failed to establish a prima facie case of obviousness.

Applicants' Rebuttal to Examiner's Position 5

The Examiner has failed to provide any basis for rejecting the following element of independent claim 35:

"an application proxy to manage communication between said renderer, said document viewer, and said at least one user interface component such that said graphical user interface is rendered upon a change in said present context."

By completely ignoring the claimed application proxy element and associated limitations, the Examiner has failed to indicate how the prior art teaches or suggests all of the claim limitations. Yet again, to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Furthermore, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Applicants' Rebuttal to Examiner's Rejections of Dependent Claims

Since dependent claims 36-41 incorporate all elements and limitations of claim 35, the Applicants submit that these dependent claims are patentable for at least the same reasons that claim 35 is patentable over the cited art of record.

- C. The combination of references as relied upon by the Examiner fail to teach or suggest all limitations of claims 42 as required to establish a *prima facie* case of obviousness.**

Rejection

Applicants' claim 42 (Group III) stands rejected under 35 U.S.C. §103(a) as being unpatentable over Smith and Ezekiel.

Summary of Group III Claim

Claim 42 of Group III is directed to a method for creating a graphical user interface for an application program implemented with a component architecture. Independent claim 42 was rejected by the Examiner based on the combined teachings of Smith and Ezekiel.

The Group III claim limitations that are not described in the cited art when considered as a whole, as relied on by the Examiner for the basis of rejection, are described as follows:

- Claim 42 requires an operation for defining a graphical user interface layout for at least said at least one application program component, said graphical user interface layout defining a position and an arrangement for said at least one user interface component in said at least one context.
- Claim 42 requires an operation for instantiating said at least one user interface component and associating it with said at least one application program component.
- Claim 42 requires an operation for determining a present context of said application program and rendering said graphical user interface in accordance with said graphical user interface layout defined for said present context.

- Claim 42 requires an operation for rerendering said graphical user interface each time said present context of said application program changes.

Examiner's Position

The Examiner has not provided an explanation of how the cited references teach or suggest the limitations of claim 42 (Group III).

Applicants' Rebuttal

The Examiner has failed to indicate how the prior art teaches or suggests all of the limitations of claim 42 (Group III). To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

D. Conclusion

As noted above, the Applicants submit that the cited art of record fails to teach or suggest each of the claimed elements in each of the argued groups. The Applicants would also like to respectfully bring to the Board's attention that during prosecution of this case the Examiner has had at least two opportunities (i.e., (1) after the original filing and (2) after the CPA filing) to perform a search in order to find and apply art that is more relevant to the presented claims. Specifically, the Office has relied upon the teachings of Smith since the first Office Action on the original filing. The Applicants therefore conclude that the Smith reference must represent what the Office believes to be the strongest cited art available. In view of the shortcomings of the Smith reference when applied in combination with the other cited references, as discussed in the Applicants' aforementioned

arguments, the Applicants submit that the presently claimed invention is patentable over the cited art.

The Applicants respectfully request that the Board consider each group of claims separately, and consider each claim element individually with respect to the teachings of the cited art.

In sum, the Applicants submit that the rejections of the Group I claims under 35 U.S.C. §103(a), the Group II claims under 35 U.S.C. §103(a), and the Group III claims under 35 U.S.C. §103(a) are in error, and respectfully request that the Board of Appeals and Interferences reverse the Examiner's rejections of the claims on appeal.

Respectfully Submitted,
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APPENDIX A

CLAIMS ON APPEAL

9. A system for providing a graphical user interface for a component based application program, comprising:

a plurality of user interface components;

a document viewer for displaying a document or modifying the document within a component based application program, the document viewer having a user interface requirements specification referencing at least one of said plurality of user interface components; and

a renderer to render a graphical user interface for the component based application program according to said document viewer user interface requirements specification, when said document viewer is added as a component of the component based application program, without a need to recompile or reinstall the component based application program.

10. The system of claim 9 further comprising a workflow manager for registering user interface components associated with said user interface requirements specification.

11. The system of claim 9 wherein at least one of said plurality of user interface components is a button.

12. The system of claim 9 wherein at least one of said plurality of user interface components is a slider.

13. The system of claim 9 wherein at least one of said plurality of user interface components is an edit box.

14. The system of claim 9 wherein at least one of said plurality of user interface components is implemented as an ActiveX control.

15. The system of claim 9 wherein at least one of said plurality of user interface components is implemented as a Java applet.

16. The system of claim 9 wherein at least one of said plurality of user interface components is implemented using Javascript.

17. The system of claim 9 wherein said document viewer is implemented as a COM object.

18. The system of claim 9 wherein said document viewer is implemented as a DCOM object.

19. The system of claim 9 wherein said document viewer is implemented as a CORBA object.

20. The system of claim 9 wherein said renderer is a DHTML browser.

21. A method for providing a graphical user interface for a component based application program, comprising:

providing a user interface requirements specification for a document viewer, the document viewer being used to display a document or to modify the document within a component based application program, and the user interface requirements specification referencing at least one of a plurality of user interface components; and

rendering a graphical user interface for the component based application program according to the document viewer user interface requirements specification, when the document viewer is added as a component of the component based application program, without recompiling or reinstalling the component based application program.

22. The method of claim 21 further comprising registering user interface components associated with the user interface requirements specification, with a workflow manager.

23. The method of claim 22 further comprising:
adding a new user interface requirements specification to the component based application program; and
registering user interface components associated with the new user interface requirements specification, with the workflow manager.

24. The method of claim 22 further comprising:
providing a modified user interface requirements specification; and
registering user interface components associated with the modified user interface requirements specification, with the workflow manager.

25. The method of claim 21 wherein at least one of the plurality of user interface components is a button.

26. The method of claim 21 wherein at least one of the plurality of user interface components is a slider.

27. The method of claim 21 wherein at least one of the plurality of user interface components is an edit box

28. The method of claim 21 wherein at least one of the plurality of user interface components is implemented as an ActiveX control.

29. The method of claim 21 wherein at least one of the plurality of user interface components is implemented as a Java applet.

30. The method of claim 21 wherein at least one of the plurality of user interface components is implemented using Javascript.

31. The method of claim 21 wherein the document viewer is implemented as a COM object.

32. The method of claim 21 wherein the document viewer is implemented as a DCOM object.

33. The method of claim 21 wherein the document viewer is implemented as a CORBA object.

34. The method of claim 21 wherein said rendering is performed by a DHTML browser.

35. A system for providing a graphical user interface for a component based application program, comprising:

at least one user interface component;

a document viewer for displaying a document or modifying the document within a component based application program, the document viewer having a user interface requirements specification referencing at least one of said at least one user interface component, the document viewer having at least one predefined user interface layout defining an arrangement of said at least one user interface component;

a renderer to render a graphical user interface according to said at least one predefined user interface layout and a present context for said component based application program; and

an application proxy to manage communication between said renderer, said document viewer, and said at least one user interface component such that said graphical user interface is rendered upon a change in said present context.

36. The system claimed in claim 35 wherein said renderer comprises a DHTML browser.

37. The system claimed in claim 36 wherein said predefined user interface layout is a browser page defined in DHTML.

38. The system according to claim 37 wherein said DHTML includes at least one object to communicate with said application proxy.

39. The system according to claim 38 wherein said at least one object is a Javascript object.

40. The system according to claim 36 wherein said at least one user interface component is an ActiveX control.

41. The system according to claim 36 wherein said at least one user interface component is a Java applet.

42. A method for creating a graphical user interface for an application program implemented with a component architecture, comprising:

providing at least one document viewer for displaying a document or modifying the document within a component based application program, the document viewer having a user interface requirements specification referencing at least one user interface component, said at least one user interface component to be displayed in said graphical user interface in at least one context for said application program;

defining a graphical user interface layout for at least said at least one application program component, said graphical user interface layout defining a position and an arrangement for said at least one user interface component in said at least one context;

instantiating said at least one user interface component and associating it with said at least one application program component;

determining a present context of said application program and rendering said graphical user interface in accordance with said graphical user interface layout defined for said present context; and

rerendering said graphical user interface each time said present context of said application program changes.

AF/2700

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SMITH et al.

Application No: 09/240,844

Filed: February 1, 1999

For: USER INTERFACE METHOD AND SYSTEM
FOR APPLICATION PROGRAMS IMPLEMENTED
WITH COMPONENT ARCHITECTURES



) Attorney Docket No: ROXIP259

) Examiner: VU, Kieu D.

) Group Art Unit: 2173

) Date: September 12, 2003

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 12, 2003.

Signed: _____

Neely Entwistle

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION -- 37 CFR 192)

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Sir:

This Appeal Brief is in furtherance of the Notice of Appeal filed in this case on June 9, 2003. The Notice of Appeal was received by the USPTO on June 12, 2003 (copy of PTO received postcard with June 12, 2003 date enclosed). Therefore, the due date for this Appeal Brief, including a one-month extension of time requested herein is September 12, 2003. This Appeal Brief is transmitted in triplicate:

This application is on behalf of:

☐ Small Entity ☒ Large Entity

Pursuant to 37 CFR 1.17(f), the fee for filing the Appeal Brief is:

☐ \$160.00 (Small Entity) ☒ \$320.00 (Large Entity)

09/17/2003 AMONDAFT 00000100 09240844

02 FC:1251

110.00 OP

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136

09/17/2003 AMONDAFT 00000099 09240844

02 FC:1251

110.00 OP

☒ Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

<u>Months</u>	<u>Large Entity</u>	<u>Small Entity</u>
<input checked="" type="checkbox"/> one	\$110.00	\$55.00
<input type="checkbox"/> two	\$400.00	\$200.00
<input type="checkbox"/> three	\$920.00	\$460.00
<input type="checkbox"/> four	\$1,440.00	\$720.00

If an additional extension of time is required, please consider this a petition therefor.

☐ An extension for __ months has already been secured and the fee paid therefor of \$ is deducted from the total fee due for the total months of extension now requested.

☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that Applicant has inadvertently overlooked the need for a petition and fee for extension of time.

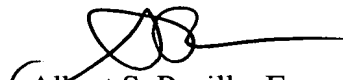
Total Fees Due:

Notice of Appeal Fee	<u>\$320.00</u>
Extension Fee (if any)	<u>\$110.00</u>
Total Fee Due	<u>\$430.00</u>

☒ Enclosed is Check No. 09525 in the amount of \$430.00.

☒ Charge any additional fees or credit any overpayment to Deposit Account No. 50-0850, (Order No. ROXIP259). Two copies of this transmittal are enclosed.

Respectfully submitted,
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